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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 09/611,221 | 07/06/2000 | Donald Mager | MAG 0002P | 4818 |

7590 09/28/2005

Attention William C Fuess
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San Diego, CA 92121-1613

| EXAMINER | |
|---|---|
| RAO, ANAND SHASHIKANT | |
| **ART UNIT** | **PAPER NUMBER** |
| 2613 | |

DATE MAILED: 09/28/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

| Office Action Summary | Application No. | Applicant(s) | |
|---|---|---|---|
| | 09/611,221 | MAGER, DONALD | |
| | Examiner | Art Unit | |
| | Andy S. Rao | 2613 | |

*-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --*

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

1)☐ Responsive to communication(s) filed on 7/8/05.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

4)☒ Claim(s) 1-23 is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) 1-23 is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

**Application Papers**

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.



Qy

**DETAILED ACTION**

***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 7/8/05 has been entered.

2. Applicant's arguments with respect to claims 1-23 as filed on 7/8/05 have been considered but are moot in view of the new ground(s) of rejection based previously uncited portions of the previously applied reference addressing the newly added limitations.

***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.
>
> (e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002

do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

1. Claims 1-23 are rejected under 35 U.S.C. 102(e) as being anticipated by Bloomfield et al., (hereinafter referred to as "Bloomfield").

Bloomfield discloses for use with a subject vehicle having both brakes and brake lights (Bloomfield: column 3, lines 45-55), a method of activating the brake lights of the subject vehicle comprising: first sensing any application of the brakes of the subject vehicle (Bloomfield: column 4, liens 44-64); second sensing any presence of brake light emissions of another vehicle to the forward of the subject vehicle (Bloomfield: column 5, lines 5-45); and always activating the brake lights of the subject vehicle during the persistence of either an application of the brakes of subject vehicle by the first sensing (Bloomfield: column 4, lines 50-60), or during the brake light emissions of another vehicle as is determined by the second sensing (Bloomfield: column 6, lines 42-60) regardless of acceleration or de-acceleration of speed of the subject vehicle (Bloomfield: column 2, lines 50-61), proximity of the vehicle to the forward (Bloomfield: column 3, lines 25-30), or status of any airbag or anti-lock braking system of the subject (Bloomfield: column 5, lines 1-3), as in claim 1.

Regarding claims 2-3, Bloomfield discloses activating the brake lights includes imaging with a color camera a multi-color image (Bloomfield: column 5, lines 14-20) to the forward of the subject vehicle (Bloomfield: column 5, lines 33-37); storing in a memory the multi-color image (Bloomfield: column 10, lines 63-67); interpreting with a microprocessor a current multi-

colored image resulting from the imaging with a historical multi-colored image resulting from the storing in order to recognize changes in the image indicative of the activation of one or more brake lights to the forward of the subject vehicle (Bloomfield: column 4, lines 65-67; column 5, lines 1-16), as in the claims.

Regarding claim 4, Bloomfield discloses wherein interpreting with the microprocessor is further of angles that the pixels occupy relative to the subject vehicle, thus to further decide whether detected brake lights are not in lane but are instead to either side of the subject vehicle (Bloomfield: column 5, lines 25-30), as in the claim.

Regarding claims 5-6, Bloomfield discloses interpreting with the microprocessor, and the comparison of the current image with the stored image, transpires by a point accumulation process with positive point, meaning that one or more brake lights is deemed likely have been detected when sufficient points are accumulated from assessment of at least two of the specified factors (Bloomfield: column 6, lines 7-60), as in the claims.

Regarding claim 7, Bloomfield discloses alerting the driver of the subject vehicle upon the determination of brake light emissions of another vehicle (Bloomfield: column 5, lines 63-67), as the claim.

Regarding claim 8, Bloomfield discloses using a predetermined time delay for the second sensing means for sensing the brake light emissions of another vehicle (Bloomfield: column 8, lines 45-60), as in the claim.

Bloomfield discloses a system of activating the brake lights of the subject vehicle comprising: a first sensor for producing a first signal upon application of the brakes of the subject vehicle (Bloomfield: column 4, lines 44-64); a second sensor producing a second signal

upon any presence of brake light emissions of another vehicle to the forward of subject vehicle (Bloomfield: column 5, lines 5-45); and an activator of the brake lights and/or brakes of the subject vehicle during the persistence of either the first signal (Bloomfield: column 4, lines 50-60), or the second signal (Bloomfield: column 6, lines 42-60), regardless of acceleration or de-acceleration of speed of the subject vehicle (Bloomfield: column 2, lines 50-61), proximity of the vehicle to the forward (Bloomfield: column 3, lines 25-30), or status of any airbag or anti-lock braking system of the subject (Bloomfield: column 5, lines 1-3), as in claim 9.

Regarding claims 10-11, Bloomfield discloses a color camera imaging a multi-color image (Bloomfield: column 5, lines 14-20) to the forward of the subject vehicle (Bloomfield: column 5, lines 33-37); a memory storing the multi-color image (Bloomfield: column 10, lines 63-67); and a microprocessor interpreting a current multi-colored image resulting from the imaging with a historical multi-colored image resulting from the storing in order to recognize changes in the image indicative of the activation of one or more brake lights to the forward of the subject vehicle (Bloomfield: column 4, lines 65-67; column 5, lines 1-16), as in the claims.

Regarding claim 12, Bloomfield discloses two spaced apart CCDs (Bloomfield: column 5, lines 15-20); wherein differing angles to each CCD of a red light to forward of the subject vehicle is indicative of the distance of the red light (Bloomfield: column 5, lines 25-30), as in the claim.

Regarding claims 13-14, Bloomfield discloses a red light optical sensor producing a red light signal responsive to the intensity of the red light of the forward subject vehicle (Bloomfield: column 5, lines 15-20), an ambient light sensor for producing an ambient light signal responsive to the intensity of the ambient light forward of the subject vehicle (Bloomfield: column 5, lines

1-15); and a threshold difference detector for receiving the red light signal and the ambient light signal (Bloomfield: column 5, lines 10-15), for producing the second, and for the duration of, such times are a magnitude of the red light signal is greater than a predetermined ratio to a magnitude of the ambient light signal (Bloomfield: column 6, lines 6-60), as in the claims.

Regarding claim 15-16, Bloomfield discloses that the second signal is a pulsed signal (Bloomfield: column 6, lines 40-50), as the claim.

Regarding claim 17, Bloomfield discloses suing a proximity sensor for sensing an obstacle including another vehicle (Bloomfield: column 5, lines 60-65), as in the claim.

Regarding claim 18, Bloomfield discloses using a predetermined time delay for the second sensing means for sensing the brake light emissions of another vehicle (Bloomfield: column 8, lines 45-60), as in the claim.

Regarding claim 19, Bloomfield discloses using an alarm for alerting a driver of the subject vehicle (Bloomfield: column 5, lines 63-67; column 6, lines 1-4), as in the claim.

Bloomfield discloses a system for propagating brake lights between vehicles upon highway (Bloomfield: column 3, lines 45-65), comprising: a sensor in a vehicle for sensing any application of brakes to the forward vehicle (Bloomfield: column 5, lines 5-45); and an activator of always activating the brake lights of the vehicle responsive to the second application of brake lights to the forward (Bloomfield: column 4, lines 50-60) regardless of acceleration or de-acceleration of speed of the subject vehicle (Bloomfield: column 2, lines 50-61), proximity of the vehicle to the forward (Bloomfield: column 3, lines 25-30), or status of any airbag or anti-lock braking system of the subject (Bloomfield: column 5, lines 1-3), wherein brake lights are always

propagated from the forward of the vehicle to the rearward of the same vehicle (Bloomfield: column 6, lines 42-60), as in claim 20.

Regarding claim 21, Bloomfield discloses that the sensor and the activator are present in each of a broken succession of vehicles (Bloomfield: column 8, lines 15-35), as in the claim.

Regarding claims 22-23, a color camera imaging a multi-color image (Bloomfield: column 5, lines 14-20) to the forward of the subject vehicle (Bloomfield: column 5, lines 33-37); a memory storing the multi-color image (Bloomfield: column 10, lines 63-67); and a microprocessor interpreting a current multi-colored image resulting from the imaging with a historical multi-colored image resulting from the storing in order to recognize changes in the image indicative of the activation of one or more brake lights to the forward of the subject vehicle (Bloomfield: column 4, lines 65-67; column 5, lines 1-16), as in the claims.

***Conclusion***

2. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Andy S. Rao whose telephone number is (571)-272-7337. The examiner can normally be reached on Monday-Friday 8 hours.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mehrdad Dastouri can be reached on (571)-272-7418. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Andy S. Rao
Primary Examiner
Art Unit 2613

asr
September 26, 2005

ANDY RAO
PRIMARY EXAMINER